



Ø BEAT



COLO. SPRINGS,
COLORADO

MAY 1980

PHASE III will become OSCAR 9 Launch Date — Late May 1980

AMSAT CHART EXPLAINED

Six Special Service Channels (SSC) are presently adopted, though more can be added as/if requirements warrant. These SSC designations are as follows (L = low end of 2-meter passband; H = high end):

L1 Scientific channel

L2 Data exchange network channel (AMICON — AMSAT International Computer Network)

L3 NTS (National Traffic System) formal cw record traffic net and/or its international equivalent

H1 Cw/RTTY bulletins and code practice

H2 Educational channel

H3 — General bulletin channel (voice)

This article refers to AMSAT chart on Page 4

All SSCs are 4-kHz wide and their placement is at the passband extremities just above and below the beacons and their associated guardbands. The various SSC functions are explained below.

L1 (Scientific): This SSC is proposed for serious research into phenomena/techniques where Phase III is a vital experimental component.

L2 (AMICON): This channel is dedicated to providing a means for licensed amateurs, who are also hobbyists, to network their computers through the satellite. The potential use of this channel should stretch the imagination of even the most visionary of amateurs. Though some preliminary work in this area has been done and articles have appeared in the media, much work has yet to be done, especially in the area of standardizing interfaces and protocols. Nevertheless, in allocating this SSC use, AMSAT recognizes that such a network is imminent.

L3 (NTS): The NTS channel is dedicated to scheduled, formal, record, cw traffic-handling similar in function to present nets.

H1 (Cw/RTTY Bulletins): Cw code practice and cw/RTTY AMSAT, IARU, etc. bulletins.

H2 (Education): This SSC is proposed for scheduled school demonstrations and other coordinated educational objectives.

H3 (Bulletin): Of the SSCs, the proposed general bulletin channel will probably be of the greatest interest to the majority of amateurs. Plans call for this SSC to be employed for transmission of general interest bulletins and satellite orientation information in the world's major languages. The orientation function would serve as a "roadmap" to satellite usage and locations of activities much as one would find upon entering a museum or convention. This channel would be used for both "real-time" and prerecorded messages beamed from Earth to be transmitted on a continuous basis. ARRL, RSGB, REF, DARC, AMSAT, IARU, AMSAT Member Societies and other official bodies/agencies will be called upon to supply the bulk of the text for the bulletins.

Orbit Magazine — March 1980

MEETING NOTICE

The May meeting of the Pikes Peak Radio Amateur Association will be held on May 14, at Sabin Junior High at 7:30 p.m. The program will be given by a representative of Ehrhorn Technical Operations of Canon City on RF Amplifiers. All interested amateurs and other persons are invited to attend.

P.P.R.A.A. DIRECTORS

PRESIDENT	*Don Lohse KBØKQ 1410 E. LaSalle 80907	635-7469
V. PRESIDENT	*Dave Vierling NØDV 2511 N. Tejon 80907	473-0293
SECRETARY	Lorna Schleuter WDØBTF Box 38 Grn. Mtn. Falls 80919	684-2151
TREASURER	David Riese WBØSDW 5102 Galley 80915	574-2224
Board Member	Frank Freiler WBØPAJ 411 Lakewood Cir. 80911	x208 596-6800
Board Member	Art Mayer WAØAEH 3032 Drakestone Dr. 80909	635-7223
Board Member	*Ray Uberecken AAØL 9635 Thoroughbred Ln. 80908	495-3544
Board Member	*Charleen Colvin WBØYOB 4610 Topaz 80918	598-7704

(* Two-year board terms began November 1979)

ZERO BEAT is published monthly in the interest of the members of the Pikes Peak Radio Amateur Association, Inc., Colorado Springs, CO. Permission is given to reprint articles or excerpts provided credit is given. Deadline for submission of articles to be published is the third week of the month. Classifieds accepted anytime.

The Pikes Peak Radio Amateur Association meets on the second Wednesday of every month at Sabin Jr. High School, 3605 N. Carefree Circle at 7:30 p.m. and all amateurs and interested persons are cordially invited. The Association also conducts an informal net on all Wednesday evenings, except meeting night, on 146.52 MHz FM at 7:00 p.m.

Editor: Jim Colvin NØAVY, 4610 Topaz, Colorado Springs, CO 80918 598-7704

BOARD MINUTES

The meeting was called to order at 7:30 p.m. on April 7, 1980 at the home of Dave and Dona Riese. The following members were present: Dave Riese, WBØSDW; Dona Riese KAØAFU; Art Mayer, WAØAEH; Ray Uberecken, AAØL; Dave Vierling, NØDV; Frank Freiler, WBØPAJ; Don Lohse KBØKQ; Lorna Schleuter, WDØBTF; Dick Schleuter, WBØPNX; Oak Stockton, KØROL; Ken Holloway, KAØDST; and Charleen Colvin, WBØYOB.

Ken Holloway reported on the progress of the Swap Fest and what was still to be done. It was decided to charge \$3.00 per table for those desiring a table. There are 62 large bags of electronic parts, 100 paper bags of disassembled soldering irons, and other prizes to be raffled. The raffle tickets will cost the same as at club meetings. Ticket sellers and bake sale items are still needed. The Pikes Peak F.M. Association has the food concession organized. The talk-in will be on 16/76 and 52 will be the alternate frequency. Dona Riese will make the numbers for the tables.

Oak Stockton KØROL once again volunteered his cabin as the site of the August club picnic.

The club has been assessed \$100.00 for reenstatement as a non-profit organization. Different ways to raise the money were discussed.

Still need net control operators for the 52 Net on Wednesday nights.

The amateur radio display is scheduled for May 3 and 4 for the Mall of the Bluffs. A chairman is needed to get this organized and underway.

Arrangements were made to contact people for future club meeting programs.

Dave Vierling will take care of the letter to the U.S. Forest Service to request permission to use the land for the Field Day, June 28 and 29.

The next board meeting will be held at Dave Vierling's home at 2511 N. Tejon at 7:30 p.m. on May 5, 1980.

There being no further business the meeting was adjourned.

Respectfully submitted,
Charleen Colvin, WBØYOB

PPFMA

From some of the schedules and requests for communications assistance I have heard, it appears as though we're going to have a busy spring and summer. This was evidenced by the activity during the 19 April weekend supporting the Health Fair and Walkathon.

Late March and April have been relatively quiet from an emergency communications point of view, maybe because our annual spring snowstorm seems to have bypassed us or didn't materialize (yet). Hopefully this trend will continue through the thunder storm season.

The following public services were reported this month:

March 20, 1980: WB9JGC reported an accident at Bijou and Academy via KBØKP.

March 21, 1980: WØYAD reported an accident with injuries on I-25 to WAØQQT who handled the land line to complete the report.

March 27, 1980: WBØJUW relayed the report of a 2 car accident at Fountain and Academy to the CSPD through WØMEY.

March 28, 1980: WB5OMP reported two vehicles off I-25 to the Highway Patrol via KBØKP.

March 31, 1980: KØDJ reported an accident without injuries on I-25 to the Highway Patrol via WBØTIB.

April 6, 1980: KBØKP assisted WØREQ whose motor home was disabled on the highway in obtaining repairs.

April 13, 1980: WØKCB reported an accident on I-25 via WAØQQT.

April 17, 1980: KØROL's cabin was broken into again. He reported it to the Teller County Sheriff via WBØFLU.

Listening to discussions on the air about use of the 37/97 repeater reveals that there is considerable misinterpretation of the association's policy, published guidelines and misconceptions concerning the restrictions which precipitated these guidelines.

In an effort to alleviate this, I must first state that under normal day-to-day circumstances the repeater is an "open" machine, available for use by everyone. However, due to the extensive coverage of the machine, its potential for instant contact over a wide area and its commitment to public service and emergency use, all transmissions must, and I repeat *must* be kept short with pauses between transmissions. When contact is made and essential exchanges completed, QSY to another repeater, simplex frequency or another amateur band is most appropriate for extended QSO or "ragchew".

APRIL MINUTES

The meeting was called to order by President Don Lohse, KBØKQ, at 7:30 p.m. at Sabin Junior High on April 9, 1980. There were 43 members and guests present.

The minutes of the last meeting were approved as printed in Ø Beat.

The treasurer's report given by Dave Riese, WBØSDW, showed a balance of \$325.74 and \$77.55 in SERVCOM.

Ken Holloway, KAØDST, reported the Swap Fest would be in Hanger No. 8 at Peterson Air Force Base from 10 a.m. to 4 p.m. on April 13. Doors will open at 9 a.m. so people can get tables set up before 10 a.m.

The money received from the raffle ticket sales will go in part to pay the \$100.00 to reenstate the club as a non-profit organization.

Al Bailey, ADØZ, asked for volunteers for communications for the Black Forest Outhouse Race on May 10. The money taken in is split between Special Olympics and Jerry Lewis Muscular Dystrophy Fund.

The next board meeting will be at Dave Vierling's, NØDV, 2511 N. Tejon at 7:30 p.m. on May 5, 1980.

Copies of the article about the National Sports Festival as it appeared in 73 Magazine were made available for members to read thanks to Oak Stockton, KØROL.

Dave NØDV reported things were progressing nicely for Field Day. Kim Schluter WBØUW, has the novice station set up. Dave needs a 6 meter rig and HF antennas. The Field Day will be held in the same place as last year on Rampart Range on June 28 and 29.

Mike Stansberry, KØTER, needs volunteers with HT and mobile 2 meter rigs with antennas to work communications for the Walk For Mankind on May 17, 1980. If interested get in touch with Mike.

The Hammy Award was given to Jim Brown, KBØKP, for his service to people during the last storm.

Don Lohse, KBØKQ, will take care of the refreshments for the May meeting. Volunteers are needed for refreshments or there will be none.

Ralph Woodard, KAØGJO, will be the chairman for the Mail of the Bluffs display. Mother's Day messages and displays of various types of amateur radio gear will be available.

Volunteers are needed for communications for a sports car rally between Woodland Park and Denver on May 17, 1980. Contact Bob Poirier, KØDJ, if you are able to help.

The address for the QSL Bureau is Box 291, Omaha, Nebraska 68101. The fee is \$1.10 and they will accept personal checks.

It was announced there will be a weather repeater on 162.475 in late fall — public service band.

Net control operators needed for 52 Net on Wednesday to conduct informal net for the purpose of passing information.

Ed Means, WØVO, presented an interesting program on OSCAR Phase III. The information given stimulated much interest in the operation and capabilities of the satellite.

Respectfully submitted,
Charleen WBØYOB for
Lorna WDØBTF

PLEASE NOTE:

The Pueblo Ham Club 34/94 repeater has been changed over and is now operating on 19/79!



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PPFMA Continued from Page 2

The restrictions which dictate this policy are prescribed by the organizations that own and control the repeater site. Initially, due to legal ramifications, representatives of these organizations would have preferred that the machine be available *only* for public service and emergency use. They were subsequently convinced that in order for the repeater to be effective under emergency conditions, or any other circumstances, that it must be used. Day-to-day use proves the availability and reliability of the machine, provides each amateur operator within its coverage essential information on accessibility, training and the advantages of a long range repeater.

An accurate and complete record of public service and emergency use of the machine is essential to justifying continued occupancy of the repeater site. Each amateur who performs a service in this category, using 37/97, should report it to Tom, NØBZ or any board member no matter how insignificant it may seem.

Short term public service or emergency actions are generally accomplished with the repeater in "normal mode". For extended actions during natural disasters, weather warnings, search and rescue missions while SERVCOM or other supporting nets are operating, a circuit is activated in the repeater which emits a 1000 cycle tone burst about every second. When this is heard, all stations not directly involved must remain silent and monitor until their services are requested, unless they have information directly relevant to the operation or have another emergency to report.

Membership in the association provides for use of the 37/97 machine in accordance with the published guidelines, unrestricted use of the 16/76 machine and for those who are UHF Buffs a 450 machine. When operating on 37/97 let's all abide by the guidelines, advise hams passing through the area or new-comers of these guidelines, report public service or emergency actions and enjoy these great repeaters.

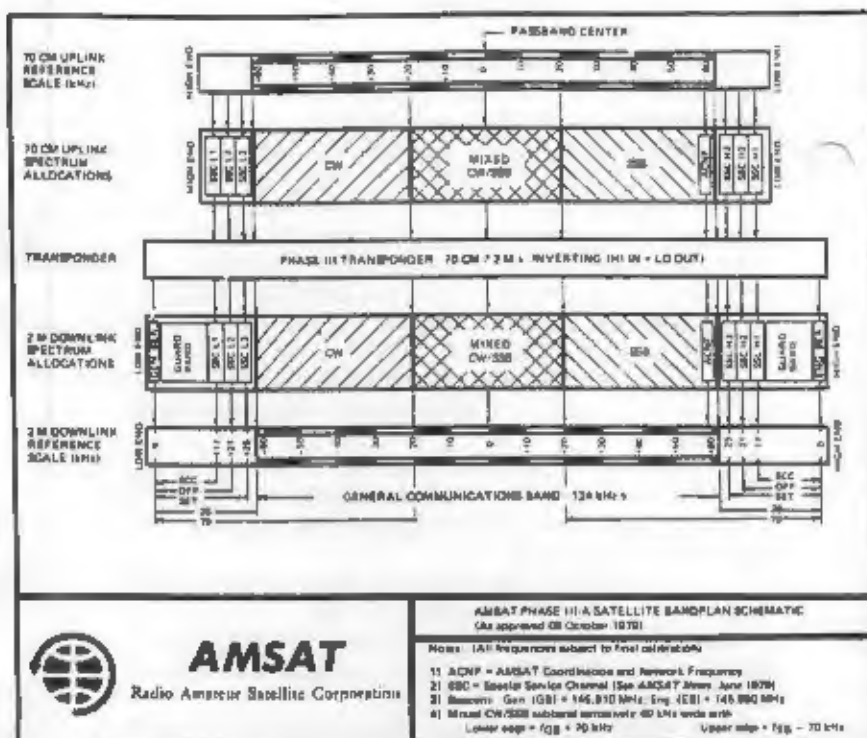


20-G EAST MOUNTVIEW LANE
COLORADO SPRINGS, COLORADO 80907

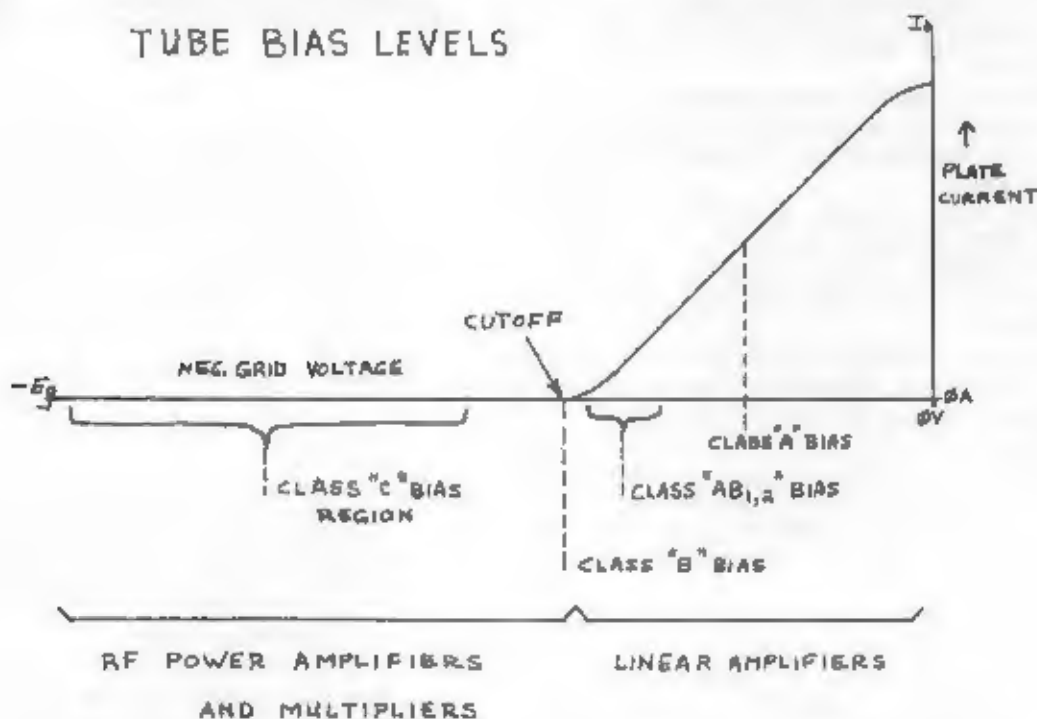
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Dick Kohlhaas, W5UDM



TUBE BIAS LEVELS



Summary of RF Amplifier Classes of Operation

Class "A"
Excellent Linearity
Poor Efficiency

Class "AB₁"
Fair to Good Linearity
Medium Efficiency

Class "AB₂"
Fair to Good Linearity
Medium Efficiency
(draws grid current is only difference with AB₁)

Class "B"
Fair Linearity
Good Efficiency

Class "C"
Poor to Bad Linearity
Highest Efficiency

de the President

Things have quieted down a little bit now, and before we get started with all our Spring public service projects, I would like to take a couple of minutes to thank those people and organizations who helped to make the recent Swapfest such a rousing success.

Ken Holloway and Dave Acree coordinated the prizes and secured the use of the hangar from the U.S. Air Force who graciously allowed us the use of the facility.

HP, Ampex, Centennial, Walker and AES who donated quality door prizes for the raffle.

Dick Schleuter, Dave Riese and Dave Vierling ran the raffle, and Dona Riese, Lorna Schleuter and Charleen Colvin sold the baked goodies.

The PPFMA sold food to the hungry masses, and Oak Stockton, Ray Uberecken, Dave Acree and Charleen and Jim Colvin rustled up the tables for all the sellers.

And last but not least, to all the people who brought stuff to sell, and money to buy. Without them, it would not have been possible.

The success of the Swapfest will allow the club to participate in some activities that we might not have been able to due to lack of funds.

Speaking of activities, we are in need of some more help for some of our projects. We have made an annual thing of providing communications for the Walk for Mankind, this year on May 17. Mike Stansberry KØTER is still looking for help — please get a hold of him if you can give an assist. Al Bailey ADØZ is rounding up help for the Black Forest Outhouse Race on May 10. The Outhouse Race is fast becoming a national event, and would be a good place for us to show our expertise. If either of these events interests you, please get a hold of the appropriate person. **GET INVOLVED!**

A.E.S. Communications

404 Arrawanna

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- | | |
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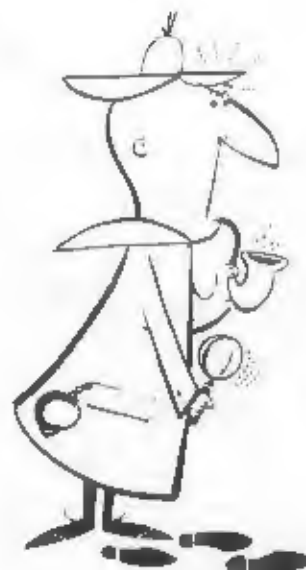
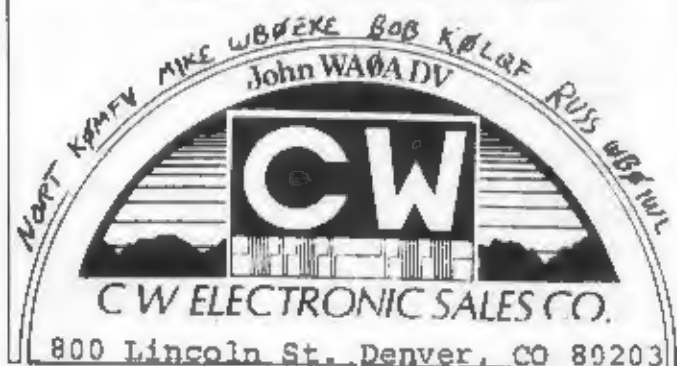
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9 — 5:30 Monday — Friday 9 — 1:00 Saturday

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If it's CW, it's communications.

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We're looking for help:

May 3, 4	Mall of the Bluffs	Ham Radio Exhibit
May 10	Black Forest	Out House Race
May 17	Colorado Springs	Walk for Mankind

It is with regret that we announce that Paul King WØKSB has joined the ranks of Silent Keys. Paul contributed much to the amateur community in past years, and he will be missed.

FOR SALE

Conar 400 Transmitter, Conar 500 Receiver, Heath VFI VFO — Works good — \$90/offer, Mike KAØGMO, 390-6808

Wilson 1402 HT — new nicads factory installed Narrow Band Filter, Leather Case, Flex antenna, charger \$139.95. Contact WBØLTV. Smitty.

Typesetting courtesy The Letter Setters

FOR SALE: Rohn 25-G 58 foot foldover with double guy kit, thrust bearing, heavy duty mast, torque arm guy bracket, less base section. Eighteen months old. Cost \$825.00, sell \$495.00. 20 and 15 meter Hygain monobanders 2048A and 1538A, each with Hy-Gain balun. Eighteen months old. \$195.00. Heathkit IM-17 solid state portable VOM, \$20. Fred Alden W8JTD (303) 599-0972.

FOR SALE: S.B.E. Transceiver, 165 watts — Transmit single tone — AC or DC. Base or mobile — 15-80 meters, \$125.00. YAESU 101-B fan, etc. \$475.00. Perfect shape, new spare finals — have digital readout for it. Or make offer. YAESU 101Z — Absolutely perfect: 10 hours use — \$598.00. Contact WA6SDD Leon H. Solomons, 3615 Regis St., 574-5535.

HEY! WANNA CONTACT THE WORLD? Have 2-Elc Hygain Quad — \$125.00. Assembled and tested. NØAVY Jim Colvin, 598-7704 evenings.

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